

Application S/N 10/511478
Response to Office Action Dated 10/09/2008

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) An ultrasonic probe, comprising:

an insertion portion having a storage portion disposed at a foremost end, the storage portion comprising:

an ultrasonic element for transmitting and receiving ultrasonic waves;

and a pressurized sound window enclosing the ultrasonic element; and

a sound propagation liquid charged in the sound window,

a grip portion attached to the insertion portion, the grip portion comprising an elastic reserve tank;

a charged sound propagation liquid in the sound window and in communication with the elastic reserve tank; and

a barrier layer on an internal wall surface of the sound window

~~wherein on an internal wall surface of the sound window, a barrier layer capable of preventing permeation of liquids and gases into a material constituting the sound window and thus maintaining a pressure inside the sound window is provided by being polymerized into a layer form or by being attached the elastic reserve tank absorbs changes of pressure of the charged sound propagation liquid in the sound window to maintain the pressure within and shape of the sound window.~~

2. (Cancelled)

3. (Original) The ultrasonic probe according to claim 1, wherein the barrier layer comprises at least one selected from a polyparaxylene layer and a metal layer.

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4. (Original) The ultrasonic probe according to claim 3, wherein the barrier layer comprises a polyparaxylylene layer and the layer thickness of the polyparaxylylene layer is in the range from 0.1 μm to 500 μm .

5. (Original) The ultrasonic probe according to claim 3, wherein the barrier layer comprises a polyparaxylylene layer and the polyparaxylylene layer is formed by vapor deposition of diparaxylylene or the derivative thereof.

6. (Original) The ultrasonic probe according to claim 3, wherein the barrier layer comprises a metal layer and the metal layer comprises at least one selected from the group consisting of aluminum, gold, nickel and platinum.

7. (Original) The ultrasonic probe according to claim 3, wherein the barrier layer comprises a metal layer and the thickness of the metal layer is in the range from 0.1 μm to 30 μm .

8. (Currently Amended) The ultrasonic probe according to claim [[1]] 3, wherein the barrier layer comprises a plurality of layers.